REMARKS/ARGUMENTS

The arguments and amendments presented herein include the arguments and amendments Applicants discussed with the Examiner during phone interview dated April 9, 2008. The Examiner requested Applicants to submit the discussed arguments and amendments for reconsideration, which Applicants present herein. Applicants submit that the arguments and amendments presented herein make the substance of the phone interview of record to comply with 37 CFR 1.133. If the Examiner believes that further information on the interview needs to be made of record to comply with the requirements, Applicants request the Examiner to identify such further information.

Applicants amended claims 1, 4, 6, 7, 10, 11, 12, 15, 18, 20, 21, 24, 25, 26, 29, 35, 37, 38, 41, 42, and 43 to recite that "local address(es)" comprise "local port address(es)" to conform all the claims to the requirements of claim 3, 17, 31, and 34 added to independent claim 1, 15, 29, 32 that require that the initial local address comprises a port address.

Applicants amended claims 4, 6, 10, 18, 20, 21, 2435, 36, 37, and 41 to change the dependency to one of the base claims 1, 15, and 32.

Applicants amended claims 11, 25, and 42 to remove a redundant clause with respect to a clause added to base claims.

Amended claim 27 to change "code executed to perform" to "operations further comprise" to correct the language.

Applicants request the Examiner to enter the above amendments because the amendments involve incorporating dependent claim subject matter and making corrections to improve the claim language to place the claims in condition for allowance.

1. Claims 1-46 are Patentable Over the Cited Art

The Examiner rejected claims 1, 4-15, 18-29, 32, 35-46 as anticipated (35 U.S.C. §102(b)) by Coile (U.S. Patent No. 6,061,349). Applicants traverse for the following reasons.

Amended independent claims 1, 15, 29, and 32 require: maintaining an initial configuration by assigning multiple local interfaces to one initial local port address of a port to which the local interfaces are assigned as part of the initial configuration; for each local interface, receiving a remote address of a remote interface on at least one remote device to which the local interface connects; using the initial local port address to identify the local interfaces

assigned to the initial local port address in response to receiving a same remote address for each remote interface connected to the local interfaces assigned the initial local port address; generating at least one identifier in response to receiving multiple remote addresses from the remote interfaces connected to the local interfaces; and assigning different identifiers to the local interfaces previously assigned the initial local port address in response to generating the at least one identifier.

Applicants amended the claims as discussed during the phone interview to amend claim 1 to include the requirements of claims 2 and 3, amend claim 15 to add the requirements of claims 16 and 17, amend claim 29 to add the requirements of claims 30 and 31, and amend claim 32 to add the requirements of claims 33 and 34, Applicants further changed instances of "local address" to "local port address" to conform the claim language to the added claim requirements. The Examiner suggested Applicants submit the above amendments and indicated that the above amendments would possibly overcome the art of record. Applicants submit that the amended claims are patentable over the cited art for the following reasons.

The Examiner cited col. 4, lines 26-44 of Coile as disclosing the claim requirement using the initial local port address to identify the local interfaces assigned to the initial local port address in response to receiving a same remote address for each remote interface connected to the local interfaces assigned the initial local port address. (Final Office Action, pg. 2)

The cited col. 4 mentions:

> An IP packet sent by a user for the purpose of sending data to an existing connection or establishing a connection contains an IP address in its header for the destination machine to which the connection is made and also a port number for the destination machine. The IP address is obtained from a Domain Name Service (DNS) server that returns an IP address for the domain name selected by the user. The port number is selected by the user to be either a well known port or else some other port which the user knows has a certain daemon running on it with which the user desires to interact. The present invention implements a plurality of internet sites on a single server by running all of the daemons for each internet site on a different set of ports that are defined for that site. A "Local Director" is provided to intercept packets which are directed to certain ports by a user. Once a packet from a user is intercepted, the Local Director translates the destination port number specified by the user to the destination port number which corresponds to the port on which a server is running the daemon for the user specified port of the user specified destination IP address.

The cited col. 4 mentions that a packet may have an IP address and a port number, and that a server uses different ports to run different internet sites, and that a local director in the server translates a destination port specified port to the port number corresponding to the port on which server is running a daemon.

Nowhere does this cited col. 4 anywhere disclose or mention the claim requirement that an initial local port address to which multiple local interfaces are initially assigned are used to identify local interfaces assigned to the local port address in response to the local interfaces receiving the same remote address for each connected remote interface. This would mean that an initial local port address is used to identify local interfaces connected to remote interfaces having the same remote address.

The cited col. 4 discusses how a packet may have an IP address and port number and that different port numbers are used. However, there is no disclosure that an initial local port address is used to identify local interfaces if those local interfaces connect to remote interfaces having the same remote address. There is no disclosure in the cited col. 4 that multiple local interfaces are identified by the initial local port address in the initial configuration when those local interfaces connect to remote interfaces having the same remote address. In fact, the cited col. 4 nowhere discloses or mentions how to determine when to use the same local port address for multiple local interfaces. Instead, cited col. 4 discusses how to translate user port to a port on which the server is running the daemon for the user specified port.

In the Response to Arguments with respect to claim 1, the Examiner found that that the argument upon which Applicants relies "how to determine when to use the same local address for multiple local interfaces" is not recited in the rejected claims, but that amendment to the claims could distinguish over art. (Final Office Action FOA, pg. 6) Applicants submit that the current claims do in fact recite how to determine when to use the same local address for multiple local interfaces because the claim recites "using the initial local port address to identify the local interfaces assigned to the initial local port address in response to receiving a same remote address for each remote interface connected to the local interfaces assigned the initial local port address."

On pages. 5-6 of the Final Office Action, the sections of Coile the Examiner cites concern how to translate a received address, not how to assign multiple interfaces to the same local port address depending on the returned remote addresses of connected remote interfaces.

There is no disclosure or mention in the cited Coile about how to assign local interfaces to a same local port address based on the value of remote addresses, i.e., the same remote address, of remote interfaces connected to the local interfaces.

Dependent claims 2, 16, 30, and 33 added to claims 1, 15, 29, and 32, respectively, require generating at least one identifier in response to receiving multiple remote addresses from the remote interfaces connected to the local interfaces and assigning different identifiers to the local interfaces previously assigned the initial local address in response to generating the at least one identifier. The Examiner cited col. 4, lines 45-67 of Coile as disclosing the claim requirement of generating at least one identifier in response to receiving multiple remote addresses from the remote interfaces connected to the local interfaces. (Final Office Action, pg. 2) Applicants traverse.

The above discussed cited col. 4 mentions that a packet may have an IP address and a port number, and that a server uses different ports to run different internet sites, and that a local director in the server translates a destination port specified port to the port number corresponding to the port on which server is running a daemon.

Nowhere does the cited col. 4 disclose that at least one identifier is generated when multiple remote addresses are received from remote interfaces connected to the local interfaces having the initial local port address. Instead, the cited col. 4 discusses how a destination port may be translated to a port on the server.

The Examiner cited col. 14, lines 56-67 as disclosing the added claim requirement of assigning different identifiers to the local interfaces previously assigned the initial local port address in response to generating the at least one identifier. (Final Office Action, pg. 3) Applicants traverse.

The cited col. 14 mentions that a local director receives packets for a virtual machine and routes those packets to the physical machine port running the process expected to be run on the virtual machine port requested by the user. An object keeps track of a virtual IP address and port to which client is attempting to connect and the physical IP address and port assigned to the virtual IP address and port.

Nowhere does the cited col. 14 disclose assigning different identifiers to local interfaces assigned an initial local port address in response to generating an identifier when multiple remote addresses are received. In other words, the cited col. 14 does not disclose assigning different

identifiers to local interfaces assigned the initial local port address in the initial configuration when the local interfaces receive different remote addresses from the connected remote interfaces. Instead, the cited col. 14 discusses how virtual addresses and ports map to physical ones. There is no disclosure how to assign identifiers to local interfaces assigned an initial local port address when remote addresses are received from the remote interfaces connected to the local interfaces.

Accordingly, claims 1, 15, 29, and 32 are patentable over the cited art because the cited Coile does not disclose all the requirements of these claims.

Claims 4-14, 18-28, and 35-46 are patentable over the cited art because they depend from one of claims 1, 15, 29, and 32, which are patentable over the cited art for the reasons discussed above. Moreover, the following dependent claims provide further grounds of patentability over the cited art.

Amended claims 4, 18, and 35 depend from claims 3, 17, and 34, respectively, and further require that each generated identifier comprises an additional port address, and configuring an additional port in the device for each generated additional port address and assigning local interfaces to the ports, including the additional port and port having the initial local port address.

The Examiner cited col. 10, line 50 to col. 11, line 14 of Coile as disclosing the additional requirements of these claims. (Final Office Action, pg. 3) Applicants traverse.

The cited cols. 10-11 discuss a process to find a virtual machine to handle a new connection. Virtual machine objects are searched for a virtual machine object that corresponds to the source IP address of the new packet. The objects are checked to find a virtual port on the virtual machine. If a destination port is found, then a physical machine is selected to handle the connection. The data structures contain information to send packets to the appropriate physical machine which implements a virtual machine.

The claims require that the generated identifier, generated when different remote addresses are received from the remote interfaces, comprise additional port addresses, and that local interfaces are assigned to the port having an initial port address and the additional port. Nowhere do the cited cols. 10-11 disclose assigning local interfaces to different generated port addresses when multiple remote addresses are received from the remote interfaces connected to the local interfaces. Instead, the cited cols. 10-11 discuss how to find a virtual machine to handle

a new connection, not how to assign local interfaces to different ports if multiple remote addresses are received from the remote interfaces connected to the local interfaces.

Accordingly, claims 4, 18, and 35 provide additional grounds of patentability over the cited art because the additional requirements of these claims are not disclosed in the cited Coile.

Claims 5, 19, and 36 depend from claims 4, 18, and 35, respectively, and further require the local interfaces assigned to one port connect to remote interfaces having a same remote address.

The Examiner cited col. 2, lines 44-65 as disclosing the additional requirements of these claims . (Final Office Action, pg. 3) Applicants traverse.

The cited col. 2 discusses a packet translation system for handling connections from clients to a plurality of IP addresses with a server. A packet interceptor intercepts incoming packets received at the client interface which have a packet destination IP address and port corresponding to a virtual machine IP address and port, which is translated to physical IP address and port.

Although the cited col. 2 discusses how a virtual IP address and port are translated to a physical address and port, nowhere does the cited col. 2 disclose that local interfaces assigned to one port connect to remote interfaces having a same remote address. There is no disclosure in the cited col. 2 that requires that local interfaces assigned to a port connect to remote interfaces having a same remote address. Instead, the cited col. 2 discusses how to translate virtual to physical ports and addresses.

Accordingly, claims 5, 19, and 36 provide additional grounds of patentability over the cited art because the additional requirements of these claims are not disclosed in the cited Coile.

Claims 8, 22, and 39 depend from claims 1, 15, and 32, respectively, and further require that the at least one remote device and a local device including the local interfaces implement the SAS architecture, wherein the local and remote addresses comprise SAS addresses, and wherein the local and remote interfaces comprise PHYs

The Examiner cited col. 7, line 54 to col. 8, line 20 of Coile as disclosing the requirements of these claims. (Final Office Action, pg. 3) Applicants traverse.

The cited cols. 7-8 discuss LAN interfaces, Ethernet interfaces, and FDDI interfaces. Applicants submit that nowhere do the cited cols. 7-8 disclose the use of the SAS architecture as

claimed, where the local and remote addresses involve comprise SAS addresses. The Examiner has not cited any part of Coile that discloses the use of the SAS architecture as claimed.

Accordingly, claims 8, 22, and 39 provide additional grounds of patentability over the cited art because the additional requirements of these claims are not disclosed in the cited Coile.

Applicants submit that additional dependent claims 9-14, 23-28, and 40-46 provide further details on how local addresses are assigned to local interfaces based on whether multiple remote addresses are received from remote interfaces attached to the local interfaces.

Conclusion

For all the above reasons, Applicant submits that the pending claims 1, 4-15, 18-29, 32, 35-46 are patentable. Should any additional fees be required beyond those paid, please charge Deposit Account No. 50-0585.

The attorney of record invites the Examiner to contact him at (310) 553-7977 if the Examiner believes such contact would advance the prosecution of the case.

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